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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/010,246

Filing Date: December 06, 2001

Appellant(s): SIXTO ET AL.

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Gregory L. Mayback  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed June 8, 2005.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

Appellant's brief includes a statement that claims 1-7, 17, 18, 21-26 and 28 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) *ClaimsAppealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

4,430,997	DIGIOVANNI et al.	02-1984
5,575,802	MCQUILKIN et al.	11-1996
2002/0104199	CHEN	08-2002

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 5, 7, and 21-26, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,575,802 to McQuilkin et al.

Regarding Claims 1, 21, 22, McQuilkin discloses a surgical clip with a first arm (12), a second arm (142), and a U-shaped bridge (16) connecting them [see Fig. 1; Column 1, lines 55-67]. McQuilkin discloses a deformable retainer (deformable particularly at hinge 144) extending from arm (142). The deformable retainer (140/144/126/128) has a length greater than  $\pi$  times the distance between the arms when the arms are substantially parallel [as shown in Fig. 2]. The distance between the arms is 2 mm [Column 3, line 11], and the length of the retainer portion (140), as measured from the hinge in an arcing trajectory to the edge (152) is significantly greater

than 3 times the distance between the parallel arms. Examiner estimates that the length of the retainer portion (140) is 11 mm.

Regarding Claims 2 and 23, McQuilkin discloses a surgical clip with a retainer having a thickness smaller than the thickness of the first arm. The thickness of the retainer is measured at hinge (144). The first arm has a thickness of 3 mm and the hinge portion of the retainer has a thickness of 1mm [Column 3, lines 10 and 13; Fig. 2].

Regarding Claim 4 and 25, McQuilkin discloses a retainer with a sharp tip. Retainer portion (140) has a sharp tip at tooth (150) and retainer portion (126/128) has a sharp tip at tooth (126).

Regarding Claims 5 and 26, McQuilkin discloses a retainer that is decouplable from one of the arms. If one were to disassemble hinge (16), then one would sever one arm from the other, decoupling the first arm (12) from the retainer (140).

Claims 17 and 18, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,430,997 to DiGiovanni et al.

DiGiovanni discloses a multiple clip applier for applying clips as disclosed by the applicant. DiGiovanni's clips (11) each have a first arm, a second arm, and a U-shaped bridge connecting them. Each clip has a deformable ("deflectable") retainer at its end [Column 4, lines 46-54]. Each retainer has a length of at least  $\pi$  times the distance between the arms when the arms are substantially parallel, as shown in Figure 5A. As is observable from Fig. 5A, the average distance between the two arms is much less than the length of the retainer, as measured perpendicular from the longitudinal axis of the clip [see Attachment #1].

Art Unit: 3731

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-6, 21-25, and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Publication No. US 2002/0104199 A1 to Chen.

Chen discloses a first arm, a second arm, a U-shaped bridge connecting them, and deformable retainers extending from each arm, as labeled in Attachment #2. Since the clip is made out of “metal wire” the whole clip can be characterized as deformable. The clip is of a similar construction to the common paper clip, which is commonly known to be easily bendable. No structure is given to the word “retainer” in claim 1, and therefore anything that is capable of retaining something can be considered a retainer. Each retainer (labeled in Attachment #2) has a sharp tip. The deformable retainers each have a length more than 3.14 times the distance between the first arm and the second arm.

Regarding Claims 5 and 6, the retainer could be wrapped around either or both arms and be maintained by friction.

***New Grounds of Rejection***

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3, 7-10, 18, 24 and 28-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 3 recites the limitation of "said at least one deformable retainer extending from one of said arms includes two deformable retainers, one extending from each of said arms". This limitation is not enabled because the specification does not provide any support for the retainer including two deformable retainer. The limitation implies that the first retainer has two more deformable retainers attached to said first retainer. It is also unclear as to how said one retainer includes two deformable retainers and still be extending from each arm. Claims 7, 24 and 28 are similar to claim 3 and are rejected for the same reasons presented above. Claims 8-10 and 29-31 are rejected since the claims are dependent upon claims 7 and 28.

Claim 18 recites the limitation "said at least one clip comprises a plurality of surgical clips", which is not enabled because the Appellant has not provided any support in the specification of the clip comprising a plurality of clips. Again, this

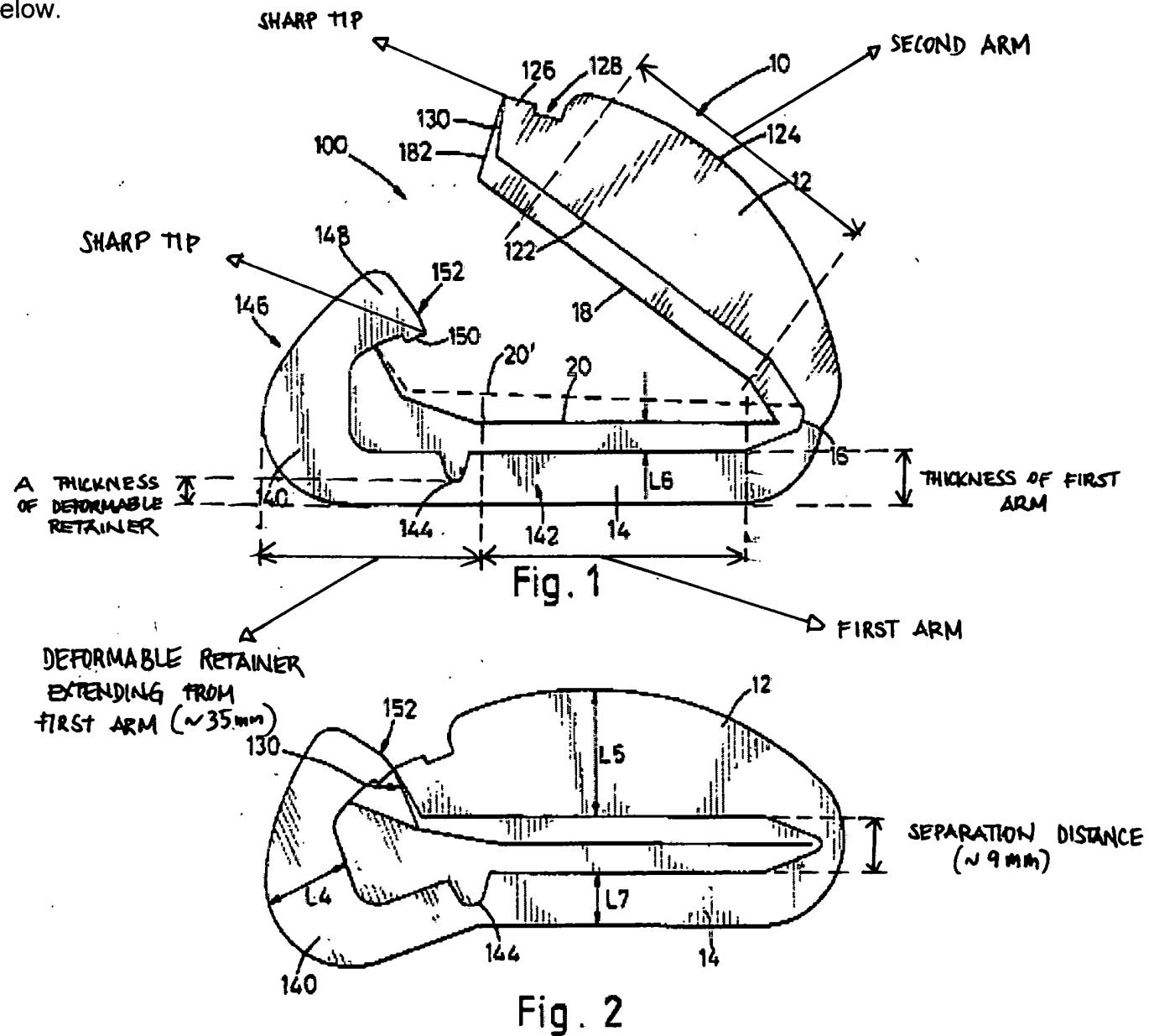
Art Unit: 3731

limitation implies that the clip itself has additional structural elements comprising a plurality of clips.

## **(11) Response to Argument**

#### **Rejections under the McQuilkin reference:**

For better illustration of the McQuilkin reference, Fig. 1 and 2 are provided below.



As to claims 1, 21 and 22, the Appellant is arguing that McQuilkin teaches a clip comprising arms having rubber linings 18 and 19 that do not allow for any separation distance between the arms when the arms are parallel. As stated before, the rubber linings 18 and 19 are not considered part of the arms. McQuilkin teaches the arms 12, 14 and lining 18,19 to be separate elements constructed from different materials. Furthermore, what the Examiner is considering as the arms is limited to the structural elements illustrated in the figures above. Whether the rubber liner is removable or not is irrelevant because there is still a space or distance between the structural elements of arms 12 and 14. Moreover, the recited claims include open-ended transitional phrases (comprising) which do not limit the invention to only the recited elements. Therefore, the clip of McQuilkin having arms 12, 14 still anticipates the claimed invention, with or without the rubber lining.

With regards to the Appellant's argument concerning the intended purpose of McQuilkin, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). Furthermore, the clip of McQuilkin, even without the rubber lining, can still be used as a surgical clip. The

space between the arms 12,14 could easily be filled by a body tissue, such as an organ, within the arms.

With regards to the retainer extending  $\pi$  times a distance between the arms, the illustrated Figures clearly shows the retainer is greater than 3.142 the size of the distance.

With regards to retainer not extending in the direction of the arm, McQuilkin clearly shows the retainer extending in a direction from the jaw, as shown above.

As to claims 2 and 23, the Appellant is arguing that McQuilkin does not disclose the clip having one arm that is thicker than the retainer. However, the claims merely recite an arm having a first thickness and the retainer having a second thickness smaller than the first thickness. It should be noted that the claims do not limit the retainer or the arm to only having one thickness each. Therefore, the thickness of the retainer in the area of hinge is smaller than the thickness of the first arm.

As to claim 4 and 25, the Appellant is arguing that McQuilkin does not teach a retainer having sharp tip. Since the Appellant does not recite any structural elements to further define a "sharp tip", it is pointed out in the Figures above that McQuilkin does teach a "sharp tip".

As to claims 5 and 26, the Appellant is arguing that McQuilkin does not teach a retainer that is decouplable. However, it should be noted that the Appellant has not provided any structural elements that performs said function. Therefore, the retainer of McQuilkin is fully capable of being decoupled by means of severing the retainer at the

hinge 144. The limitation “decouplable” is merely defined as being able to decouple. Thus, McQuilkin teaches a retainer that is able to be decoupled.

As to claims 7, 24 and 28, the Appellant merely states that “McQuilkin does not disclose a retainer with a single associated arm and without a sharp tip”. However, as pointed above in the response to claims 4 and 25, McQuilkin does teach an arm with a sharp tip. Furthermore, Figs. 1 and 2 are illustrated above showing two arms and two tips. This interpretation of the McQuilkin clip is similar to how a human arm can have a hand attached at the distal end of the arm.

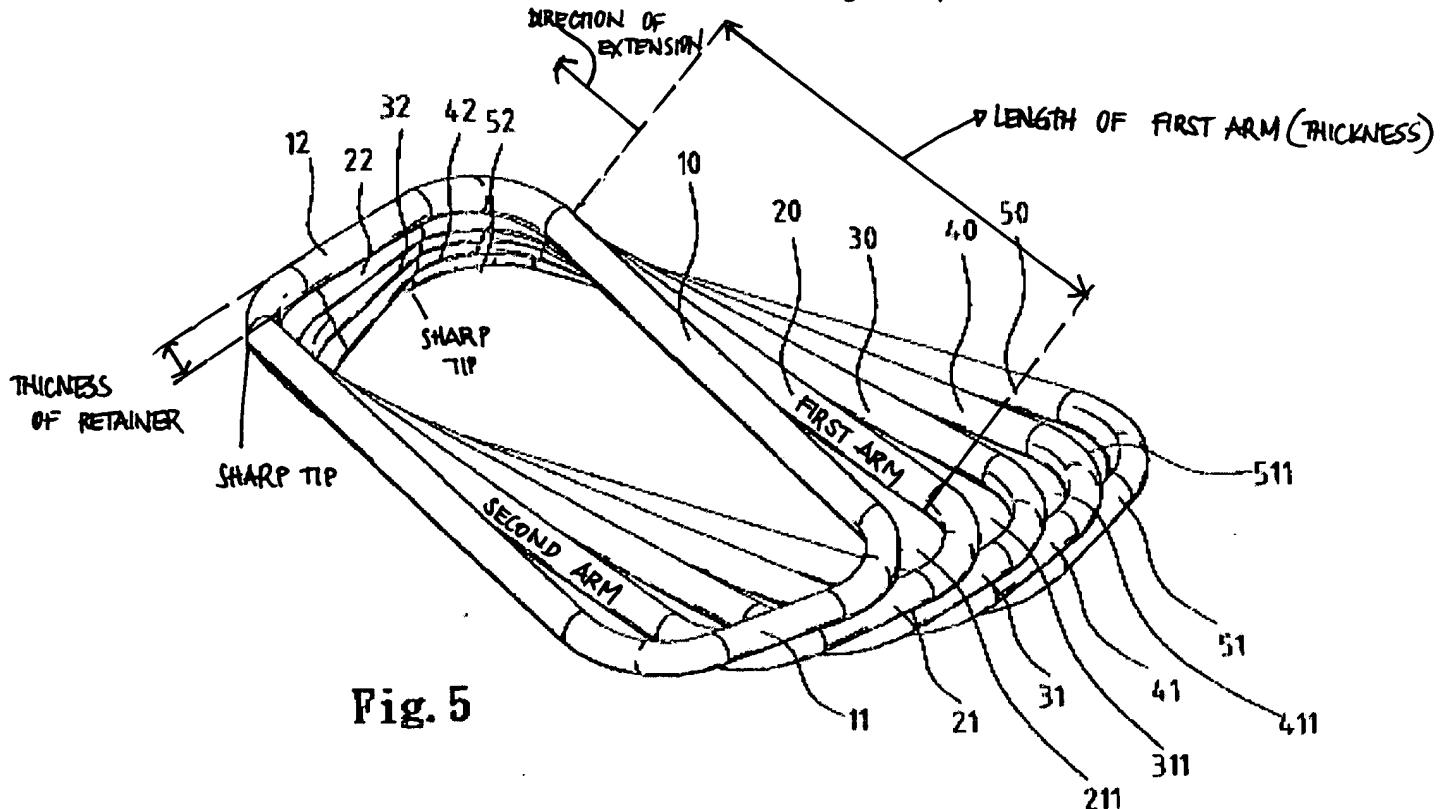
Rejections under the DiGiovanni reference:

With regards to claims 17 and 18, the Appellant argues that the clip of DiGiovanni is used for ligation. However, the intended use of the clip is irrelevant so long as it anticipates the structural limitations recited in the claim. Furthermore, as best seen in Fig. 5A, DiGiovanni teaches a clip having arms that are substantially parallel to each other while still maintaining a separation distance between the two arms.

Claim 18 is further rejected under 112, first paragraph, because the specification does not provide any support for a clip comprising a plurality of clips. This limitation suggest that the clip has a plurality of clips attached to said clip but does not provide support for said limitation.

Rejections under the Chen reference:

For better illustration of the Chen reference, Fig. 5 is provided below.



With regards to claims 1, 3-6 and 21-25, the Appellant argues that Chen does not teach a deformable retainer extending past one end of the arms (page 34 of the Brief). However, this limitation does not limit to which direction the retainer is extending towards. Furthermore, the illustrated Figure above clearly shows where the retainer extends from.

It should also be noted that Chen teaches a deformable paper clip, and that the end being referred to above as the retainer is fully capable of extending to any direction since the retainer is able to deform. The intended use of Chen's device is again

Art Unit: 3731

nothing preventing a person from using a paper clip as surgical clip or a surgical clip to hold papers. So long as the structure taught by Chen is fully capable of performing the function of a surgical clip, then the device anticipates the claim. An example of this would be a pen being used as a tracheotomy tube.

Furthermore, Chen clearly teaches the clip having a sharp tip. Sharp is defined as adapted to pierce and it is well known in the art that a paper clip tip can be used to pierce a paper, or with enough force, a person's skin.

With regards to the arguments concerning the thickness of the retainers and the arms, it is again noted that the Appellant has not clearly stated which section of the arm or retainer is referring to, i.e., is the thickness referring to the length of the arm or retainer about a longitudinal axis or is the thickness referring to a cross-section of the axis. Therefore, as clearly shown in the Figure above, Chen teaches the retainers having a thickness that is less than the thickness of the arm.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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August 19, 2005

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